UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/018,976	03/14/2002	Manfred Kogler	1406/34	3027
25297 IFNKINS WII	7590 11/06/2007 LSON, TAYLOR & HU	EXAMINER		
3100 TOWER BLVD., Suite 1200			GHULAMALI, QUTBUDDIN	
DURHAM, NC 27707			ART UNIT	PAPER NUMBER
		2611	2611	
			MAIL DATE	DELIVERY MODE
			11/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)	
i		10/018,976	KOGLER, MANFRED	
	Office Action Summary	Examiner	Art Unit	
		Qutub Ghulamali	2611	
Period fo	The MAILING DATE of this communication or Reply	appears on the cover sheet wit	h the correspondence address	
WHIC - Exter after - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOR RECHEVER IS LONGER, FROM THE MAILING asions of time may be available under the provisions of 37 CFI SIX (8) MONTHS from the mailing date of this communication period for reply is specified above, the maximum statutory pere to reply within the set or extended period for reply will, by steply received by the Office later than three months after the med patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNIC R 1.136(a). In no event, however, may a re riod will apply and will expire SIX (6) MONT atute, cause the application to become ABA	ATION. ply be timely filed HS from the mailing date of this communication. ANDONED (35 U.S.C. § 133).	
Status			•	
1) 🖂	Responsive to communication(s) filed on 2	0 August 2007.		
•	•	This action is non-final.		
3)□	Since this application is in condition for allo	wance except for formal matte	ers, prosecution as to the merits is	
	closed in accordance with the practice und	er Ex parte Quayle, 1935 C.D.	11, 453 O.G. 213.	
Dispositi	ion of Claims			
4)⊠	Claim(s) 1-9 is/are pending in the application	on.	•	
	4a) Of the above claim(s) is/are with	drawn from consideration.		
5)	Claim(s) is/are allowed.			
· · · · · · · · · · · · · · · · · · ·	Claim(s) <u>1-9</u> is/are rejected.			
-	Claim(s) is/are objected to.	M I Ali		
8)	Claim(s) are subject to restriction ar	nd/or election requirement.		
Applicat	ion Papers			
9)[The specification is objected to by the Exar	miner.		
10)	The drawing(s) filed on is/are: a)	•		
	Applicant may not request that any objection to			
44)	Replacement drawing sheet(s) including the co			•
11)[_]	The oath or declaration is objected to by the	e Examiner. Note the attached	Office Action of form PTO-152.	
Priority I	under 35 U.S.C. § 119		•	
	Acknowledgment is made of a claim for for All b) Some * c) None of:	eign priority under 35 U.S.C. §	119(a)-(d) or (f).	
	1. Certified copies of the priority docum			
	2. Certified copies of the priority docum			
	3. Copies of the certified copies of the	•	received in this National Stage	
* (application from the International Bu	• •	rossived	
	See the attached detailed Office action for a	i list of the certified copies flot	received.	
Attachmer	nt(s)			
	ce of References Cited (PTO-892)		dummary (PTO-413) s)/Mail Date	
3) 🔲 Info	ce of Draftsperson's Patent Drawing Review (PTO-948 mation Disclosure Statement(s) (PTO/SB/08)	5) 🔲 Notice of Ir	nformal Patent Application	
Pap	er No(s)/Mail Date	6) 🔲 Other:	_ ·	

Application/Control Number: 10/018,976 Page 2

Art Unit: 2611

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/21/2007 has been entered.

Response to Remarks/Amendments

- 2. Applicant's request for consideration of amendment, pages 3-4, filed 08/21/2007, with respect to the rejection of claim(s) 1-9, under 35 U.S.C 103(a) have been fully considered and after a further search and examination claims 1-9 now indicated allowable. However, in order advance prosecution in the case an examiner's amendment was considered necessary so as to correct for some minor deficiency in the claim 1 noted here under.
- 3. Applicant's arguments, see page 4-9, filed 08/21/2007, with respect to the rejection(s) of claim(s) 1-9 under 35 U.S.C 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, the amended claim 1 and dependent claims 2-9, upon further consideration, are rejected based on new

Art Unit: 2611

ground(s) of rejection made in view of new art to Anne. The rejection based on the new art follows.

Claim Objections

4. Claim 1 is objected to because of the following informalities:

Claim 1, line 3, after "codec circuit to a transmitted" the acronym "PCM" needs to be replaced with -- Pulse Code Modulation (PCM) --.

Claim 1, line 5, after "device configured to identify" the word "the" needs to be replaced with -- a --.

Appropriate correction is required.

Note: The above corrections were discussed with the applicant's representative, Mr. David Sigmon, on 9/14/2007.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anne et al (US Patent 6,744,812).

Regarding claim 1, Anne discloses a codec circuit, a programmable (tunable) digital bandpass filter, for providing filter characteristics (col. 16, lines 11-24, 35-40) of

Art Unit: 2611

the codec circuit to a transmitted PCM signal (col. 4, lines 50-65), a signal identification device configured to identify a type of modulation and transmission speed of a transmitted PCM signal and configured to set filter coefficients for the at least one programmable digital high pass filter and the at least one programmable digital low pass filter based on the identified modulation type and transmission speed (or transmission rate) of the transmitted signal (for example in a V.90 the sample rate preferably is 8 kHz) (col. 5, lines 1-20, 25-40; col. 11, lines 1-15; col. 16, lines 11-24, 35-40; col. 21, lines 11-15). Anne however, does not show use of filter labels as low pass and high pass filter, however, as understood by the examiner, and as illustrated in fig. 2, (see also col. 21, lines 11-24) the filter bank (204) includes filters, at least one digital high pass filter and at least one digital low pass filter and regarded as connected in series electrically and as disclosed by Anne these filters may be tunable (or programmable) if desired (col. 10, lines 66-67; col. 11, lines 1-15; col. 21, lines 12-24) as would be obvious to a person of skill in the art at the time the invention was made to utilize, to arrive at the same or similar results, for achieving the desired filter characteristics once the modulation mode or type is recognized because once the modulation technique is selected, the modulation selection routine 432 determines which region in the lookup table 400 holds the waveform samples for the selected modulation scheme, the modulation and filtering routine 428 then creates an outgoing digital signal based on data received through the mac port 424 by selecting waveform samples and bandpass filters the modulated data prior to transmitting through the codec).

Application/Control Number: 10/018,976

Art Unit: 2611

Regarding claim 2, Anne discloses setting filter coefficients are stored in coefficient memory devices, which are associated with the programmable digital high-pass and low-pass filters (col. 10, lines 8-54).

Regarding claim 3, Chung discloses the memory devices can be in the form of a random access memory (RAM) (col. 10, lines 24-29).

Regarding claim 4, Chung discloses memory devices are connected via coefficient setting lines to the signal identification device (fig. 4, elements 220, 400, 424).

Regarding claim 5, Anne discloses programmable digital filters can be set to a 3rd to 5th order and if desired can be designed to a seventh-order, since Anne discloses that these filters are tunable (col. 21, lines 5-15).

Regarding claims 6, Anne discloses upper and lower signal transmission cut-off frequencies can be set by means of filter settings (shows filter roll-off below 4MHz and above 8 MHz (col. 16, lines 21-24, 35-40).

Regarding claims 7 and 8, Anne discloses lower and upper signal transmission cut-off frequency can be set as part of the filter characteristic desired in bandpass filtering (col. 21, lines 5-24).

As to claim 9, Anne discloses filter to compensate for ripple in the passband filter (col. 21, lines 24-30; col. 22, lines 6-12).

Art Unit: 2611

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patents:

US Patent (6,504,865) to Liang et al.

US Patent (5,566,088) to Herscher et al.

US Patent (5,960,035) to Sridhar et al.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Qutub Ghulamali whose telephone number is (571) 272-3014. The examiner can normally be reached on Monday-Friday, 7:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh M. Fan can be reached on (571) 272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/018,976

Art Unit: 2611

Page 7

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

QG. September 28, 2007.

CHIEH M. FAN
SUPERVISORY PATENT EXAMINER